

Title (en)
Phosphosulfonate herbicides

Title (de)
Phosphonat Herbizide

Title (fr)
Herbicides de phosphosulfonate

Publication
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Application
EP 92303816 A 19920428

Priority
• US 69276391 A 19910429
• US 86200892 A 19920401

Abstract (en)

[origin: EP0511826A2] This invention concerns phosphosulfonates having the general formula <CHEM> wherein (1) Y is phenyl; naphthyl; benzyl; (C5-C8)cycloalkyl; a 5-membered heteroaromatic ring having from one to four heteroatoms each being independently N, O or S, provided that no more than one is O or S; a 6-membered heteroaromatic ring having 1, 2 or 3 nitrogen atoms; or a fused 5,6- or 6,6-membered heteroaromatic ring having from one to four heteroatoms each being independently N, O or S, provided that no more than one is O or S; wherein Y optionally has up to three substituents, each being independently halogen, cyano, nitro, (C1-C6)alkoxy, halo(C1-C4)alkoxy, (C1-C6)alkyl, halo(C1-C4)alkyl, phenyl, (C1-C4)alkylcarbonyloxy, di(C1-C4)alkylcarbamoyl or (C1-C4)alkoxycarbonyl, provided that (a) no more than one of said substituents is present when Y is a thiadiazolyl ring or a tetrazolyl ring, and (b) no more than two of said substituents is present when Y is a triazolyl ring, a thiazolyl ring, or an isothiazolyl ring, except that when Y is phenyl, naphthyl or benzyl, it may have up to five substituents each being independently halogen, acetoxymethyl, methoxy or halomethoxy, but no more than two of which are acetoxymethyl, methoxy, or halomethoxy; (2) X is oxygen or sulfur; and (3) R<1> and R<2> are each independently chloro, or (C1-C6)alkyl, (C1-C6)alkoxy, halo(C2-C4)alkoxy, (C1-C4)alkylthio, (C3-C4)alkenyl, (C3-C4)alkynyl, (C1-C4)alkoxy(C1-C4)alkoxy, (C4-C8)cycloalkyl, (C3-C6)cycloalkyl(C1-C3)alkoxy, cyano(C1-C4)alkoxy, (C2-C4)alkylideneiminoxy or amino each optionally substituted with one or two of (C1-C4)alkyl, (C2-C4)alkenyl or phenyl; provided that there is not more than one phenyl group on the amino group; also provided that R<1> may additionally be phenyl or phenoxy; and also provided that R<1> and R<2> may both be alkoxy so as to form together with the phosphorus atom a 6-membered oxygen-containing ring; except that when R<1> and R<2> are both alkoxy, Y is not phenyl, 4-methylphenyl, 4-chlorophenyl, 4-bromophenyl or 3-nitrophenyl; compositions containing these compounds and their use as herbicides. n

IPC 1-7
C07F 9/40; **C07F 9/30**; **C07F 9/53**; **A01N 57/04**; **C07F 9/42**; **C07F 9/44**; **C07F 9/32**; **C07F 9/34**; **C07F 9/36**; **C07F 9/6574**; **C07F 9/6571**; **A01N 57/02**

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